REMARKS

Regarding the Amendments

Claims 1, 5-9 and 33 have been amended as set forth in the above complete listing of the claims. As amended, the claims are supported by the specification and the original claims and do not add new matter. Accordingly, Applicants request entry of the amendments and reconsideration of the pending claims in view of the amendments and remarks herein. Upon entry of the amendments, claims 1-24, 33-34, 38-42 and 60-66 will be pending.

Rejection Under 35 U.S.C. § 102

Applicants acknowledge the rejection of claims 1-19, 21, 24, 33-39, 60-62 and 64-66 under 35 U.S.C. §102(b) as allegedly anticipated by Thompson *et al.* In particular, the Examiner alleges that SEQ ID NO: 14 is disclosed in Thompson. The Examiner's attention is respectfully drawn to amended claims 1 and 33 above. As amended to advance prosecution, the claims no longer include reference to a peptide having the amino acid sequence of SEQ ID NO. 14. As such, the basis for this rejection has been obviated. Accordingly, Applicants respectfully submit that this rejection should be withdrawn.

Additionally, Applicants respectfully acknowledge the rejection of claims 1-17, 21, 24, and 33-39 under 35 U.S.C. §102(b) as allegedly anticipated by Anderton *et al.* and the applicability of this rejection to new claims 60-62 and 64-66. However, the Examiner's attention is respectfully drawn to the amended claims 1 and 33, which no longer concern peptides comprising an amino acid sequence as set forth as SEQ ID NO: 14. As SEQ ID NO: 14 is the core sequence for the peptide represented by SEQ ID NO: 2, reference to SEQ ID NO: 2 has been removed from claims 5-9 (which depend from claim 1), as well as from claim 38 (which depends from claim 33).

Rejection Under 35 U.S.C. § 103

Applicants respectfully traverse the rejection of claims 1-24, 33-34 and 38-42 under 35 U.S.C. §103(a) as allegedly unpatentable over Anderton *et al.* in view of Srivastava, Russel-Jones *et al. et al.* and Guichard *et al. et al.*

For an invention to be obvious, the differences between the claimed subject matter and the prior art are such that the claimed invention as a whole would have been obvious at the time the invention was made to a person of ordinary skill in the art. To meet this standard, the combination of references must not only teach or suggest all of the elements of the claimed invention, but must also provide a motivation for the combination and a reasonable expectation of success. It is respectfully submitted that Anderton *et al.* in view of Srivastava, Russel-Jones *et al. et al.* and Guichard *et al. et al.* do not teach or suggest all of the elements of the claimed invention, nor do they provide a motivation for making a combination as cited in Paper No. 18.

In particular, Applicants again respectfully direct the Examiner's attention to the amended claims, which no longer refer to SEQ ID NOs: 14 and 15, nor the larger sequences designated SEQ ID NO: 2 and 3. As these sequences are no longer within the claims, Applicants respectfully submit that the Anderton *et al.* reference can no longer be alleged to teach or suggest a sequence of the claimed invention. This is particularly true since the Anderton *et al.* reference specifies fragments of the full length *M. tuberculosis* hsp60 comprising a sequence of "at least 5 aminoacids which are in the same relative position as the same aminoacids in one of the sequences 81-100 and 241-270 of SEQ ID No. 1." The sequences in the claims of the invention that are derived from *M. tuberculosis* are SEQ ID NO: 6 and 8. SEQ ID NO: 6 is found at positions 210-224 and SEQ ID NO: 8 is found at positions 503-517. Neither is within the ranges disclosed by Anderton *et al.*.

Additionally, the Examiner relies upon the allegation that the Anderton *et al.* reference discloses a peptide that is within the scope of claim 1 of the invention. While Applicants

maintain their traversal that Anderton *et al.* neither taught nor suggested the subject matter of claim 1 prior to entry of the amendment above, Applicants respectfully submit that the subject matter of amended claim 1 is even further removed from the disclosure of that reference and that none of the Srivastava, Russel-Jones *et al.* and Guichard *et al.* references, alone or in combination, overcome the deficiencies of the primary reference.

Srivastava is cited by the Examiner as discussing a stress protein-peptide complex containing a cytokine and use of the complex to enhance the cytotoxic T cell response. Assuming for purposes of argument that this is correct, such a disclosure foes not compensate for Anderton *et al.*'s failure to disclose the peptides of the invention.

Additionally, the Examiner cites the Russel-Jones *et al.* reference as teaching a covalent attachment of BSA to a peptide antigen, resulting in a significant enhancement of the immune response. Nonetheless, Anderton *et al.* in view of Russel-Jones *et al.* and/or in view of Srivastava still does not teach or suggest the claimed peptides of the invention, regardless of any additional enhancements to the peptides. Accordingly, without a teaching of the peptides individually, a disclosure of any enhancement of a peptide generally, cannot teach or suggest the specifically claimed peptides or claimed compositions containing such peptides.

The Examiner cites the Guichard *et al.* reference as disclosing that the use of D amino acids to replace L-amino acids results in peptides with higher metabolic stability. Applicants respectfully submit that this teaching, when taken in combination with Anderton *et al.*, in view of Srivastava and Russel-Jones *et al.* cannot render the claimed invention obvious. The combination of references does not teach or suggest the peptides of the invention. Therefore, alterations to those peptides cannot be rendered obvious in light of the cited references.

Additionally, Applicants submit that the cited references do not suggest or motivate combination of their disclosures and that one of skill in the art would not have reasonably expected the cited combination of references to produce Applicants' claimed peptides. However,

even if the references are combined, the combination does not teach or suggest an isolated pan DR-binding peptide according to the claims (or compositions comprising any such peptide), either before or after entry of the amendment above. Accordingly, because all of the cited references, alone or taken together do not teach or suggest all of the elements of the claimed invention, it is respectfully submitted that Anderton *et al.* in view of Srivastava, Russel-Jones *et al. et al.* and Guichard *et al. et al.* does not render the claimed invention obvious under 35 U.S.C § 103(a). Withdrawal of the rejection is therefore respectfully requested.

CONCLUSION

In summary, for the reasons set forth herein, Applicants maintain that claims 1-24, 33-34, 38-42 and 60-66 clearly and patentably define the invention, respectfully request that the Examiner reconsider the various grounds set forth in the Office Action and the Advisory Action, and respectfully request the allowance of the claims which are now pending.

If the Examiner would like to discuss any of the issues raised in the Office Action or this response, Applicant's representative can be reached at (858) 677-1456. Please charge any additional fees, or make any credits, to Deposit Account No. 50-1355.

Respectfully submitted,

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